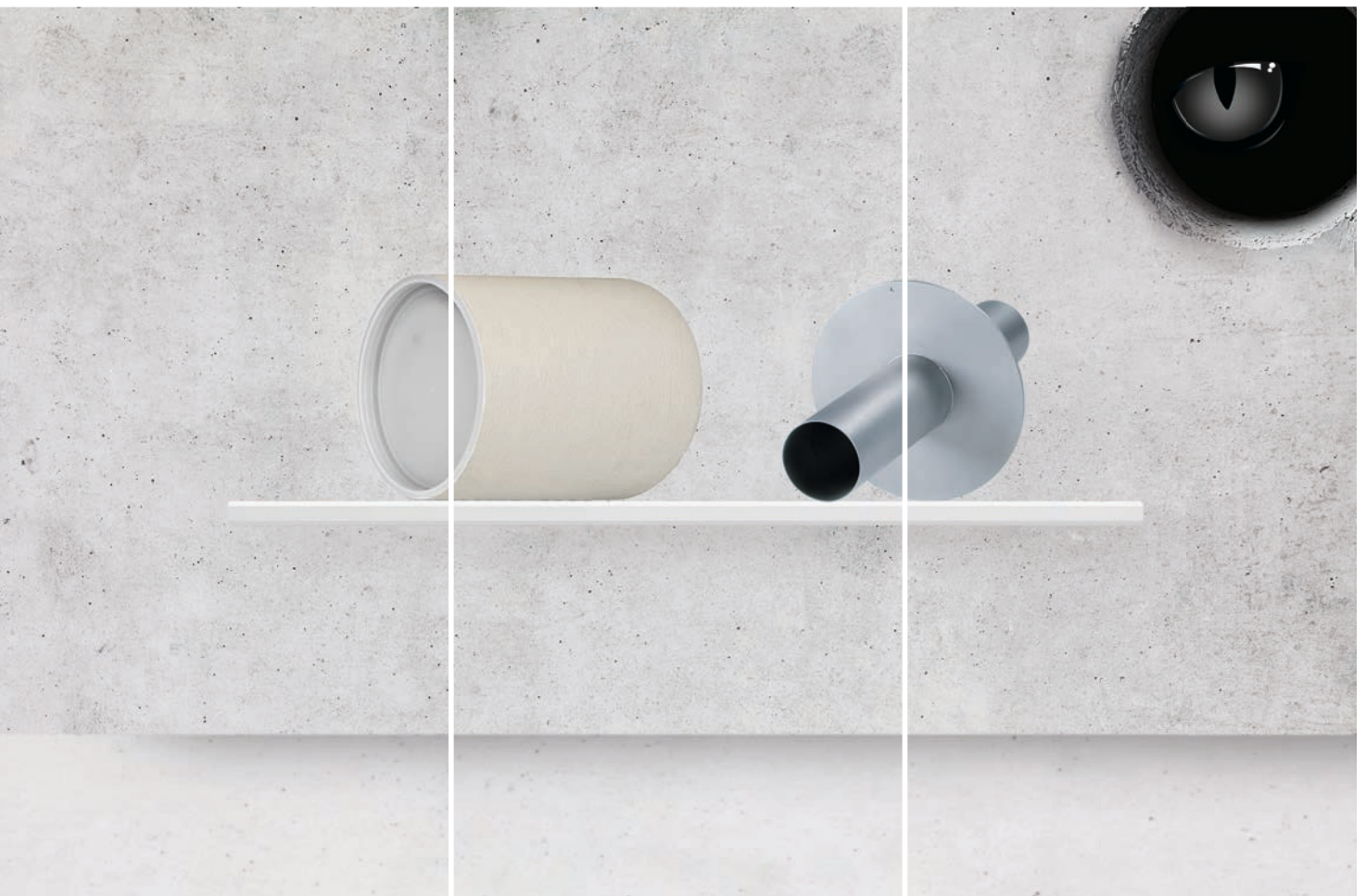


Always. Reliable. Tight.

hauff
technik®



Wall sleeves

Versatile solutions for building entries.

The wall sleeve

The wall sleeve – a largely unnoticed but very important sealing part.

Wall sleeves are a quick and inexpensive way to obtain a perfectly round building entry. They are available in different materials and designs for various applications. Wall sleeves are available for inserting into the shuttering, for joint grout applications and subsequent dowelling. Even the connection to bituminous thick coatings or waterproof membranes required by DIN 18195 part 6 for pressing water or standing seepage water can be realized by using sophisticated fixed / loose flange constructions.

The problem:

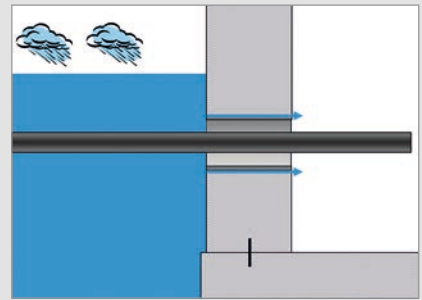
Wall sleeve is a common term often associated with a standard pipe without any additional refinements. There are numerous criteria, however, that should be taken into account when referring to a wall sleeve. Among other things, material and design play an important role. When a thin-walled wall sleeve or wall sleeve of substandard quality is set in concrete, deformations will occur. As a result, no standard seal will fit into the opening and an expensive, customised product will have to be used.



KG pipe misused as wall sleeve



KG pipe as wall sleeve

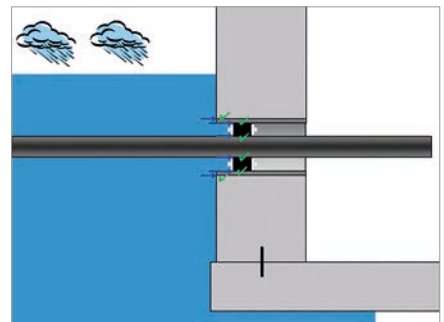


A standard thick-walled pipe is not sufficient. During the curing of the concrete, a reduction in volume occurs and micro cracks can develop between the wall sleeve and concrete resulting in leakage. An additional water barrier flange, special coating or special surface finish are essential for wall sleeves that are to be set in concrete.

In the case of wall sleeves for dowelling and fixed / loose flange constructions, however, other parameters such as the distance of the dowel holes, materials, thickness and hardness of the interlays, the connection to the bituminous thick coating and much more, play a significant role and are ultimately decisive for the permanent leak tightness of a building.

The solution:

As experts for sealing products, we know that a perfectly tight building entry starts with the properly created "hole in the wall". This is the reason why for decades we have been developing wall sleeves and flanges which are innovative, of high-quality and easy to install, and which make your building absolutely gas- and watertight when used together with our press seals.



Overview wall structure / Sealing of building entries

Basis to determine the appropriate wall sleeves

Wall type basement/ Wall structure	Sealing according to DIN 18195 – Part 4 Soil humidity and non-standing seepage water	Sealing according to DIN 18195 - Part 6 Standing seepage water and pressing water
Brick-built basement wall	No. 1 brick-built basement wall sealing on outside of building	No. 5 brick-built basement wall sealing on outside of building
Concreted basement	No. 2 concreted basement sealing on outside of building	No. 6 concreted basement sealing on outside of building
Double wall / Element wall	No. 3 double wall / element wall sealing on outside of building	No. 7 double wall / element wall sealing on outside of building
Double wall / Element wall with thermal insulation	No. 4 thermal insulation double wall / element wall sealing on outside of building	No. 8 thermal insulation double wall / element wall sealing on outside of building

Waterproof concrete according to DIN 1045

Concreted basement with waterproof concrete	Double wall / element wall with waterproof concrete	Double wall / element wall with waterproof concrete and thermal insulation
No. 9 concreted basement	No. 10 double wall / element wall	No. 11 thermal insulation double wall / element wall

If you do not find your wall structure among above examples, kindly let us have a sketch.

Standard wall sleeve

Cement-coated wall sleeve



Features and technical data:

- watertight up to 5 bar
- thanks to continuous water barrier, suitable for any wall type
- homogeneous bond with the masonry thanks to its special coating
- extremely low weight
- sealed ready for installation, break-resistant and dimensionally stable
- easy on-site adjustment to required wall thickness
- available in any length
- pipe diameters from 80 – 300 mm

Wall sleeve with special coating

The new cement-coated wall sleeve consists of a break-resistant, inherently stable plastic wall sleeve and a cement-bound special coating. This coating adheres perfectly to the wall sleeve, bonds homogeneously with the concrete and compensates any temperature variations. The cement-coated wall sleeve can either be set in concrete, brick walls or used in joint grout applications. The wall sleeve is water pressure tight up to 5 bar – certified by KIWA construction test – and is ideally suitable for use in “white tanks”.

Suitable for wall types no. 1 – 4 and 9 – 11.

Standard wall sleeve

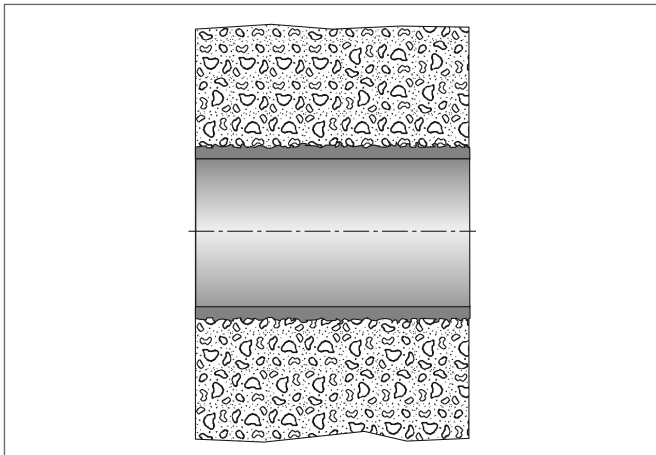
Cement-coated wall sleeve



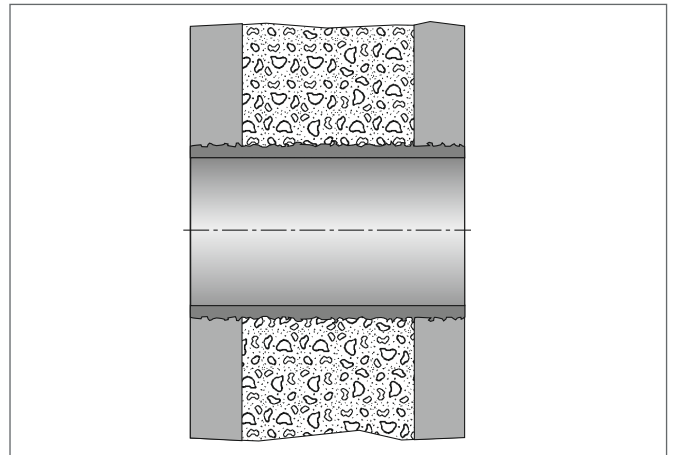
Special coating



Pipe diameters from 80 – 300 mm



ZVR in concrete wall



ZVR in double wall / element wall



On-site example



On-site example

Standard wall sleeves

Fibre cement wall sleeves



Fibre cement wall sleeve closed

With the asbestos-free fibre cement wall sleeve all types of pipes can be brought into buildings through walls, ceilings and floors. Thanks to its stability, it is particularly suitable for large pipe diameters.

The fibre cement wall sleeve can be embedded in concrete or in masonry work or cast into wall penetrations with mortar. The grooved surface creates a tight connection to the building.

The wall sleeve is corrosion-resistant, tight against pressing water and electrically non-conductive.

Suitable for wall types no. 1 – 4 and 9 – 11.



Fibre cement wall sleeve split

The proven asbestos-free fibre cement wall sleeve in split design is ideally suitable for subsequent sealing of pipes and cables that have already been laid.

For this purpose, the wall sleeve can either be set in concrete, walled in, or used for joint grout applications. The grooved surface creates a tight connection to the building.

The wall sleeve is corrosion-resistant, tight against pressing water and electrically non-conductive.

Suitable for wall types no. 1 – 4 and 9 – 11.



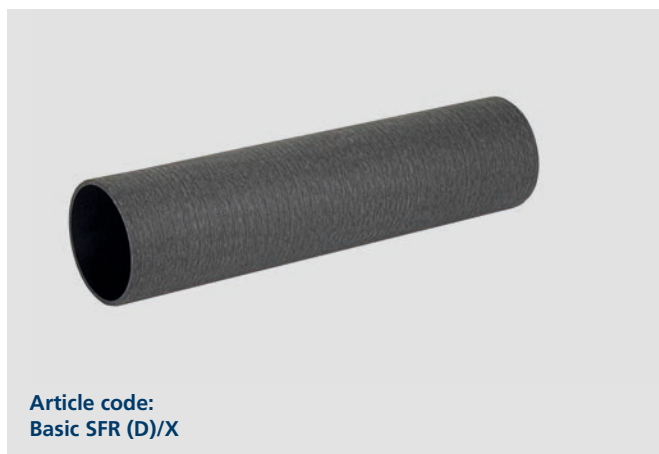
On-site example



On-site example

Standard wall sleeves / flange wall sleeves

Plastic/stainless steel wall sleeves



Article code:
Basic SFR (D)/X

Renovation wall sleeve

Renovation wall sleeves are plastic wall sleeves, which are extremely light, absolutely dimensionally stable and resistant to breakage. They can be retrofitted in breakthroughs and/or rectangular openings. The rough surface of these wall sleeves bonds homogeneously with the mortar.

Renovation wall sleeves offer users maximum freedom. Extremely flexible to install, they can easily be cut to the required length and later retrofitted into the masonry and concrete walls.

Suitable for wall type no. 1



Article code: HRD (D)-FUM/X
X = wall thickness in mm

Wall sleeve with puddle flange

The stainless steel pipe is provided with a puddle flange as an additional water barrier for inserting flush into the shuttering.

The large puddle flange ensures a firm positive connection after setting in concrete. Additionally, the high quality stainless steel ensures that the HRD wall sleeve FUM is excellently suitable for use in extreme conditions, such as loads caused by mechanical forces.

Material: V2A (AISI 304L) or
V4A (AISI 316L)

Suitable for wall type no. 9



On-site example



On-site example

Flange wall sleeves

Stainless steel wall sleeves

KIWA
construction test
tested



Article code:
HRD (D)-F



Article code:
HRD (D)-FG

Flange closed

Stainless steel flange for building entries to be sealed in front of the wall. Suitable for waterproof concrete stress class 1 for subsequent dowelling on existing walls, base slabs or recesses. Connection to a PMBC in compliance with DIN 18195 part 4 is possible.

Material: V2A (AISI 304L) or
V4A (AISI 316L)

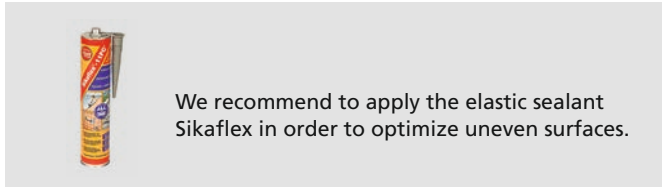
Suitable for wall types no. 1 – 4 and 9 – 11.

Flange split

Split stainless steel flange for building entries to be sealed in front of the wall. Suitable for waterproof concrete stress class 1 for subsequent dowelling on existing walls, base slabs or recesses. For cables or pipes that have already been laid. Connection to a PMBC in compliance with DIN 18195 part 4 is possible.

Material: V2A (AISI 304L) or
V4A (AISI 316L)

Suitable for wall types no. 1 – 4 and 9 – 11.



On-site example



On-site example

Flange wall sleeves

Wall sleeves in galvanized design



Article code:
HRD (D)-FUF-vz

Galvanized wall sleeve with fixed / loose flange for setting in concrete

The galvanized fixed / loose flange wall sleeve allows all types of pipes to be inserted into buildings through walls, ceilings and floors. The wall sleeve can either be set in concrete, brick walls or used in joint grout applications. With the fixed/loose flange according to DIN 18195 part 9, buildings can be made watertight as defined in DIN 18195 part 6. Please contact the manufacturer of the surface sealing for more information regarding the interlay to be used.

Suitable for wall types no. 5 – 8.



Article code:
HRD (D)-FUFA-vz

Galvanized wall sleeve with fixed / loose flange for dowelling

The galvanized fixed / loose flange wall sleeve allows all types of pipes to be inserted into buildings through walls, ceilings and floors. The fixed/loose flange is subsequently dowelled onto a wall sleeve or a core drilling. With the fixed/loose flange according to DIN 18195 part 9, buildings can be made watertight as defined in DIN 18195 part 6. Please contact the manufacturer of the surface sealing for more information regarding the interlay to be used.

Suitable for wall types no. 5 – 11.



On-site example



On-site example

Flange wall sleeves

Stainless steel wall sleeves



Stainless steel wall sleeve with fixed / loose flange for setting in concrete

The stainless steel fixed / loose flange wall sleeve allows all types of pipes to be inserted into buildings through walls, ceilings and floors. The wall sleeve can either be set in concrete, brick walls or used in joint grout applications. With the fixed/loose flange according to DIN 18195 part 9, buildings can be made watertight as defined in DIN 18195 part 6. The high-quality stainless steel makes the HRD-FUF corrosion-resistant and thus ideally suitable when exposed to chemicals. Please contact the manufacturer of the surface sealing for more information regarding the interlay to be used.

Material: V2A (AISI 304L) or
V4A (AISI 316L)

Suitable for wall types no. 5 – 8.



Stainless steel wall sleeve with fixed / loose flange for dowelling

The stainless steel fixed / loose flange wall sleeve allows all types of pipes to be inserted into buildings through walls, ceilings and floors. The fixed/loose flange is subsequently dowelled onto a wall sleeve or a core drilling. With the fixed/loose flange according to DIN 18195 part 9, buildings can be made watertight as defined in DIN 18195 part 6. The high-quality stainless steel makes the HRD-FUFA corrosion-resistant and thus ideally suitable when exposed to chemicals. Please contact the manufacturer of the surface sealing for more information regarding the interlay to be used.

Material: V2A (AISI 304L) or
V4A (AISI 316L)

Suitable for wall types no. 5 – 11.



Flange wall sleeves

Accessories for sealing in accordance with DIN 18195 part 6



Article code:
Z-(D)-FUF(A)



Article code:
Z-(D)-FUF(A)-KMB

For welded membranes

Depending on the sealing membrane used, one rubber inlay will be necessary in the clamping area for multi-layer sealings glued together with bitumen. When only one layer is loosely laid, two inlays of 2 or 6 mm thickness might be necessary (one on each side of the layer). The inlays must be made of the same material or a compatible elastomer. We recommend thus the matching inlay sets. In compliance with DIN 18195 part 9, the torques of the screws must be adapted to the flange design and sealing type.

For bituminous coating (PMBC)

With the tested Hauff sealing fleece, personnel used to working with PMBC can install the fix/loose flange and apply the 2-layer surface sealing in one single step. It is suitable for use in single-storey basement construction or for foundation depths up to a maximum of 3 m DIN 18195 part 6 (test certificates are available for bituminous sealing PCI and Mapei).

Selection aid – suitable inlays for sealing of buildings	Accessory kit: Fixed/loose flange wall sleeve Z-(D) 2/3/6 mm EPDM/silicon	Accessory kit: Fixed/loose flange wall sleeve Z-(D) KMB fleece + 2 mm EPDM
DIN EN 13967 Plastic and elastomer sheets for waterproofing of buildings	X	
DIN EN 13969 Bitumen sheets for waterproofing of buildings	X	
DIN EN 14909 Plastic and elastomer damp proof courses	X	
DIN EN 14967 Bitumen damp proof courses	X	
KMB PCI- Pecimor 2K		X
KMB Mapei Platimul 2K		X



Inlays for fixed / loose flange sealing

For underground sealings of buildings with waterproof membranes or bituminous coatings German Industrial Norm for fixed/loose flange sealing DIN 18195 part 9: 2010-05 applies. (When the sealings are made with polymer modified bituminous thick coatings (PMBC) or waterproof membranes according to DIN 18195 part 2:2009-04 for standing seepage water and pressing water according to DIN 18195 part 6:2011-12 (called black tank).) Please follow the installation instructions of the manufacturer of the waterproof membrane or bituminous coating.

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ALWAYS HAUFF